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5/28/99

-Y8RPDB-

CULVERT HYDRAULIC DATA		
DRAINAGE AREA	= 500	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 40.0	FT
DESIGN HW ELEVATION	= 600	CFS
100 YEAR DISCHARGE	= 100	YRS
100 YEAR HW ELEVATION	= 40.85	FT
OVERTOPPING FREQUENCY	= 1200	CFS
OVERTOPPING DISCHARGE	= 500+	YRS
OVERTOPPING ELEVATION	= 47.2	FT

-Y8RPDB- STA.35+12.05 =
-Y8- STA.99+67.11

END BRIDGE
-Y8RPDB- STA. 36+17.30
ELEV. = 69.81'

-Y8RPDB- STA.40+85.13 =
-Y8RPCA- STA.26+76.74 (FUTURE)

PI = 41+60.00
EL = 45.00'
VC = 530'
K = 96

PROPOSED GRADE

-Y8RPDB- STA.45+05.14 =
-L- STA.232+80.54 (FUTURE)

(-)4.9988%

(+)0.5076%

(+) 0.03%

EXISTING GROUND

1@12'x8' RCBC

BEG SPEC LAT 4' BASE DITCH
STA 46+75 -Y8RPDB- RT
EL=37.00

UNDERCUT EXCAVATION

SEE SHEET 20 FOR -Y8RPDB- PLAN
SEE SHEETS S4-1 THRU S4-36 FOR STRUCTURE PLANS
SEE SHEETS C4-1 THRU C4-4 FOR CULVERT PLANS

STV 100 Years
STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

PROJECT REFERENCE NO.	SHEET NO.
U-4751	58

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 043891 ENGINEER SEAN V. STEPHENS
Document Not Considered Final Unless All Signatures Completed
Jun 10 2017

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA C. DOLTON
Document Not Considered Final Unless All Signatures Completed
Jun 10 2017

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DITCH LEGEND	
LEFT DITCH	-----------
RIGHT DITCH	-----------

-Y8RPDB-

PIPE HYDRAULIC DATA CL III 30" RCP Sta. 50+02.2 -Y8RPDB-		
DRAINAGE AREA	= 6.4	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 26	CFS
DESIGN HW ELEVATION	= 40.8	FT
100 YEAR DISCHARGE	= 28	CFS
100 YEAR HW ELEVATION	= 41.1	FT
OVERTOPPING FREQUENCY	= 100+/-	YRS
OVERTOPPING DISCHARGE	= 29	CFS
OVERTOPPING ELEVATION	= 41.2	FT

PIPE HYDRAULIC DATA CL III 30" RCP Sta. 53+47.2 -Y8RPDB-		
DRAINAGE AREA	= 5.3	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 20	CFS
DESIGN HW ELEVATION	= 40.5	FT
100 YEAR DISCHARGE	= 20	CFS
100 YEAR HW ELEVATION	= 40.6	FT
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 38	CFS
OVERTOPPING ELEVATION	= 42	FT

PIPE HYDRAULIC DATA CL III 24" RCP Sta. 57+04.3 -Y8RPDB-		
DRAINAGE AREA	= 3.2	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 10	CFS
DESIGN HW ELEVATION	= 40.2	FT
100 YEAR DISCHARGE	= 11	CFS
100 YEAR HW ELEVATION	= 40.3	FT
OVERTOPPING FREQUENCY	= 200+	YRS
OVERTOPPING DISCHARGE	= 24	CFS
OVERTOPPING ELEVATION	= 42.0	FT

PIPE HYDRAULIC DATA CL III 2@30"RCP Sta.60+67.9-Y8RPDB-		
DRAINAGE AREA	= 21.9	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 43	CFS
DESIGN HW ELEVATION	= 41.5	FT
100 YEAR DISCHARGE	= 50	CFS
100 YEAR HW ELEVATION	= 42.1	FT
OVERTOPPING FREQUENCY	= 100	YRS
OVERTOPPING DISCHARGE	= 50	CFS
OVERTOPPING ELEVATION	= 42.1	FT

PI = 51+45.00
EL = 50.00'
VC = 180'
K = 189

PROPOSED GRADE

(+)0.5076%

(-)0.4437%

30" RCP

30" RCP

24" RCP

2@30" RCP

(+) 0.03%

(+) 0.03%

EXISTING GROUND

END SPEC LAT 4' BASE DITCH
BEG LAT 4' BASE DITCH
STA 52+00 -Y8RPDB- RT
EL=37.13

DITCH LEGEND	
LEFT DITCH	-----------
RIGHT DITCH	-----------

SEE SHEET 20 & 21 FOR -Y8RPDB- PLAN

7/14/2017
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